FIGURE 1a

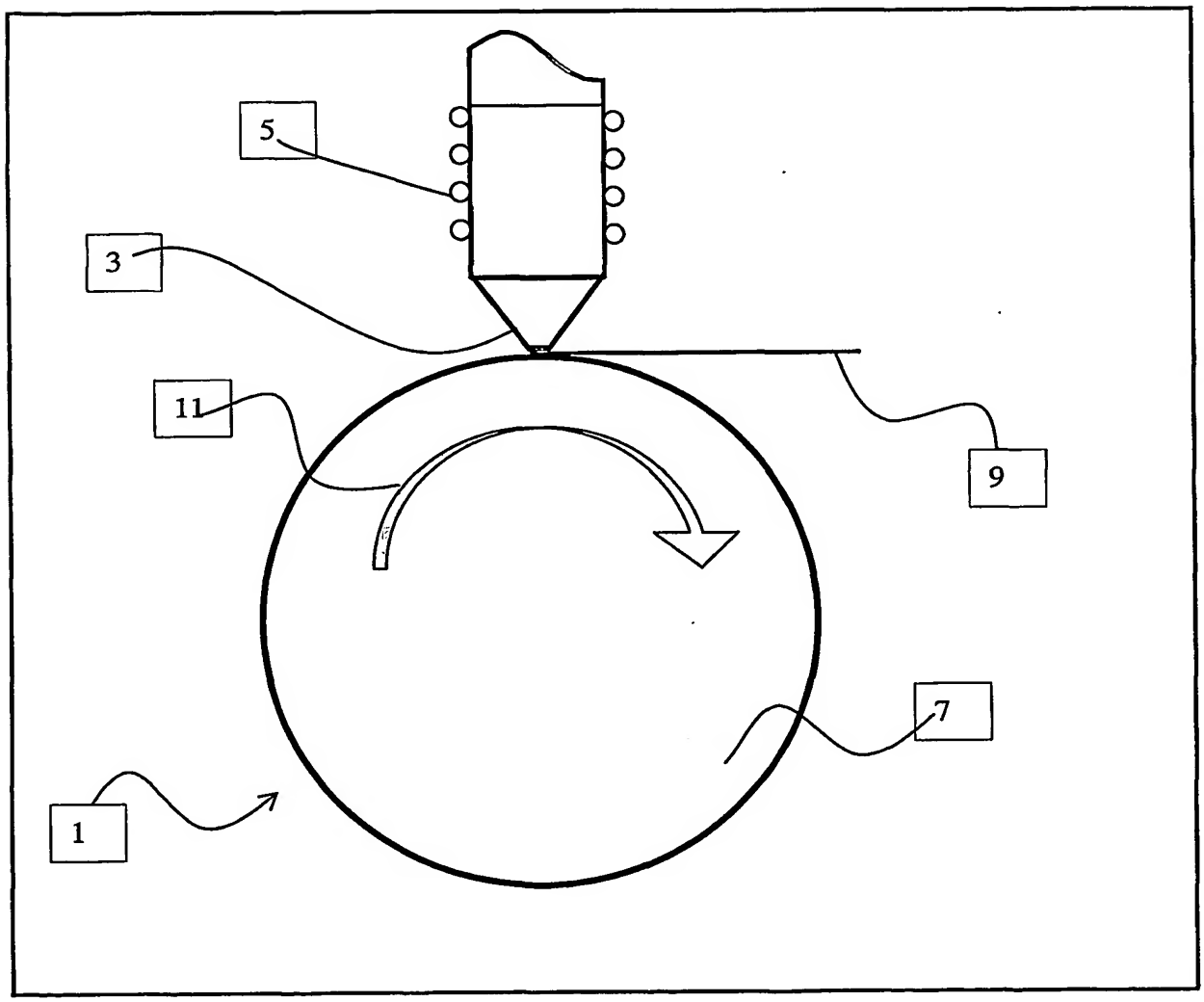


FIGURE 1b

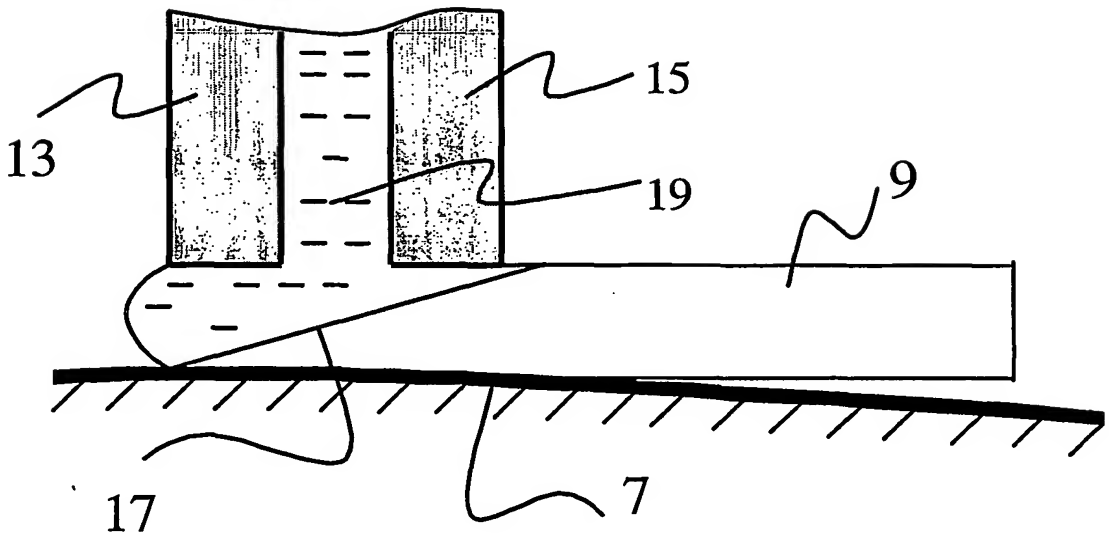


FIGURE 2

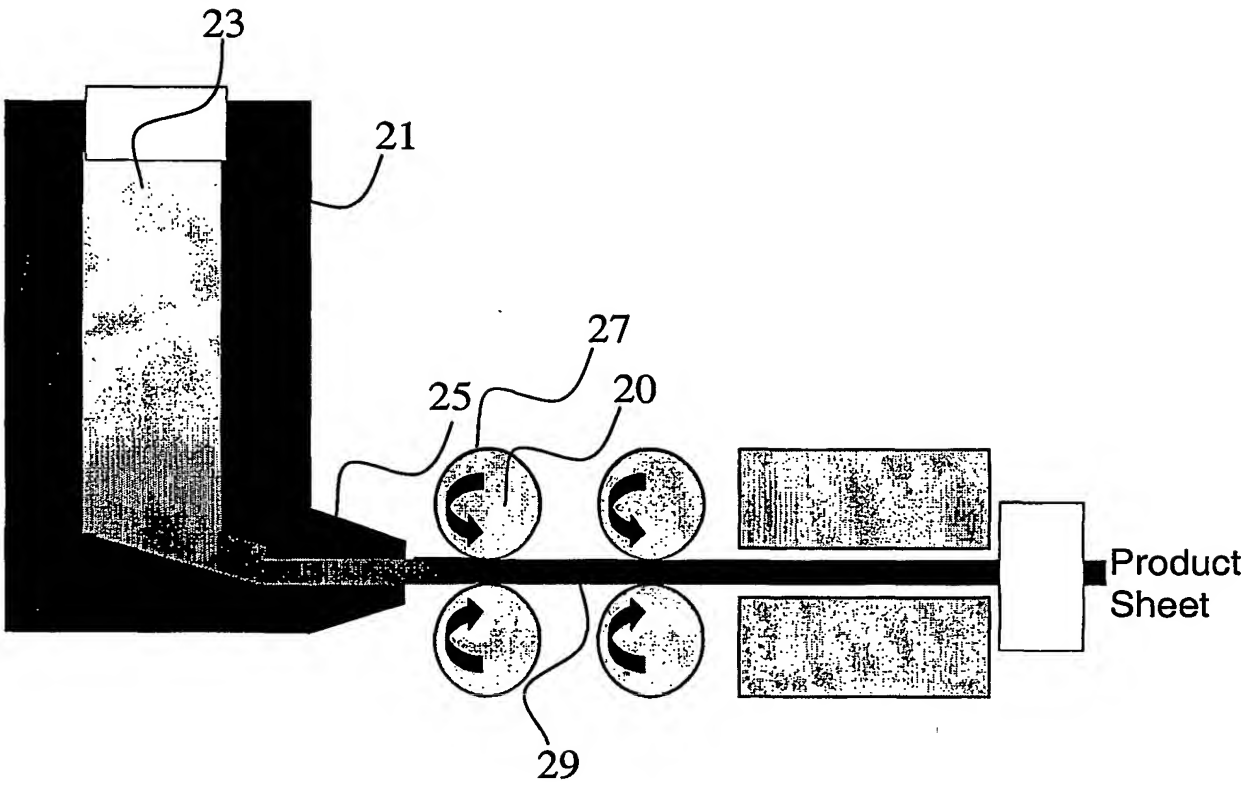


FIGURE 3

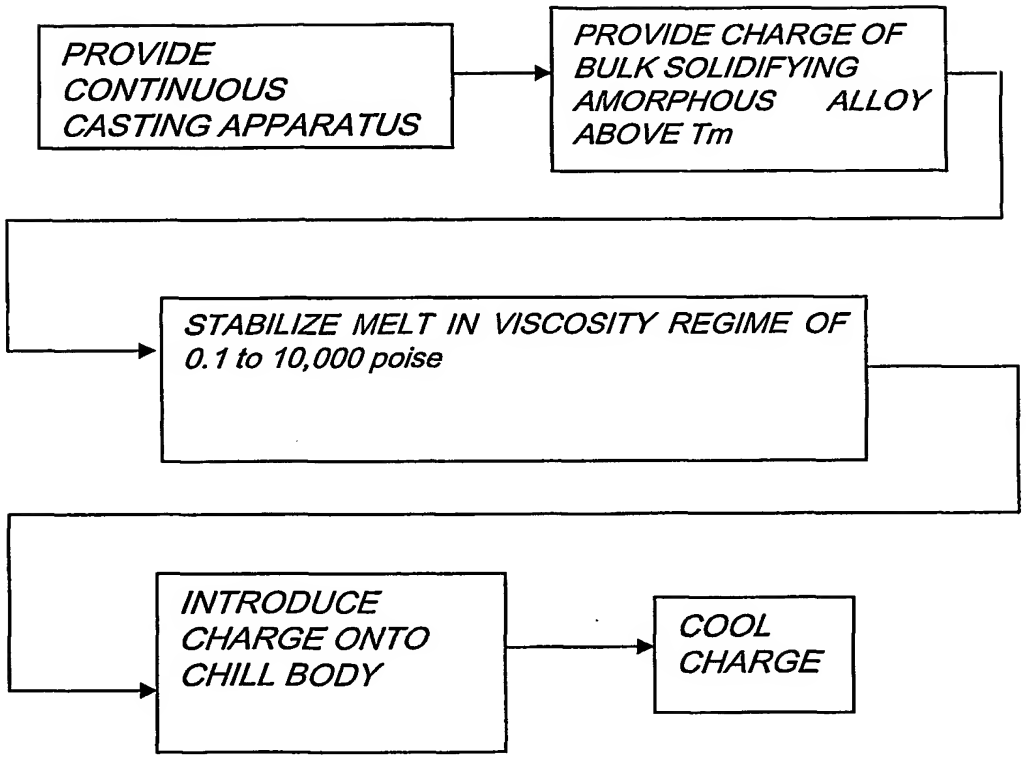

PROVIDE CONTINUOUS CASTING APPARATUS
PROVIDE CHARGE OF BULK SOLIDIFYING AMORPHOUS ALLOY ABOVE Tm
STABILIZE MELT IN VISCOSITY REGIME OF 0.1 to 10,000 poise
INTRODUCE CHARGE ONTO CHILL BODY
COOL CHARGE

FIGURE 4

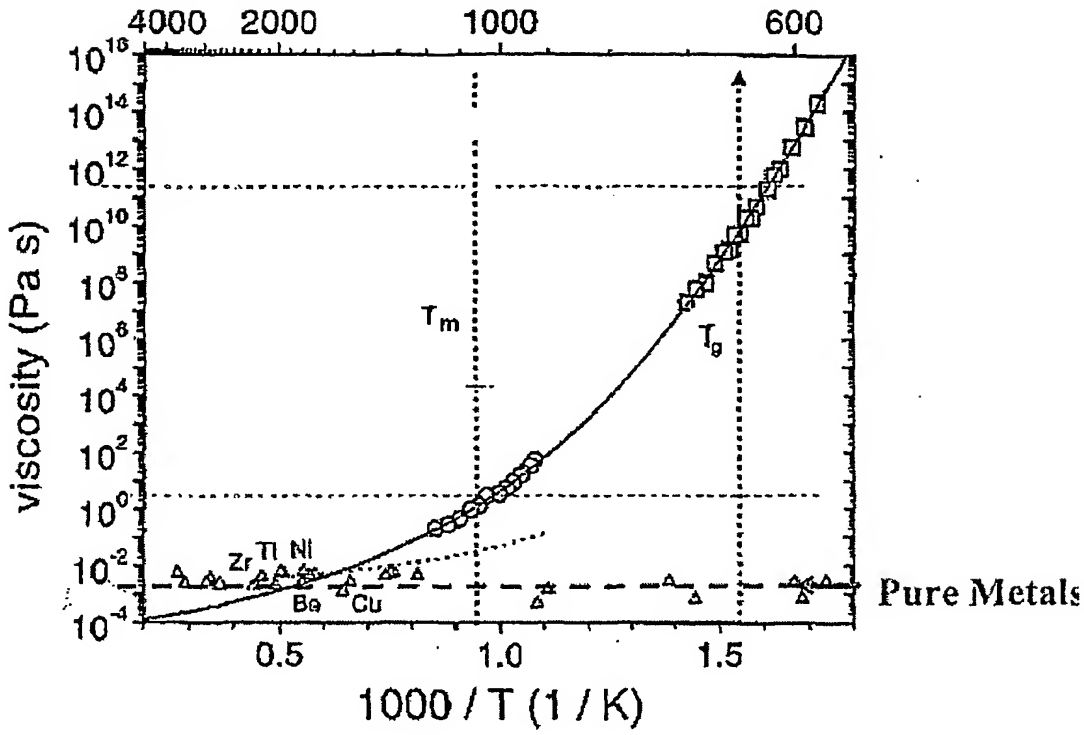
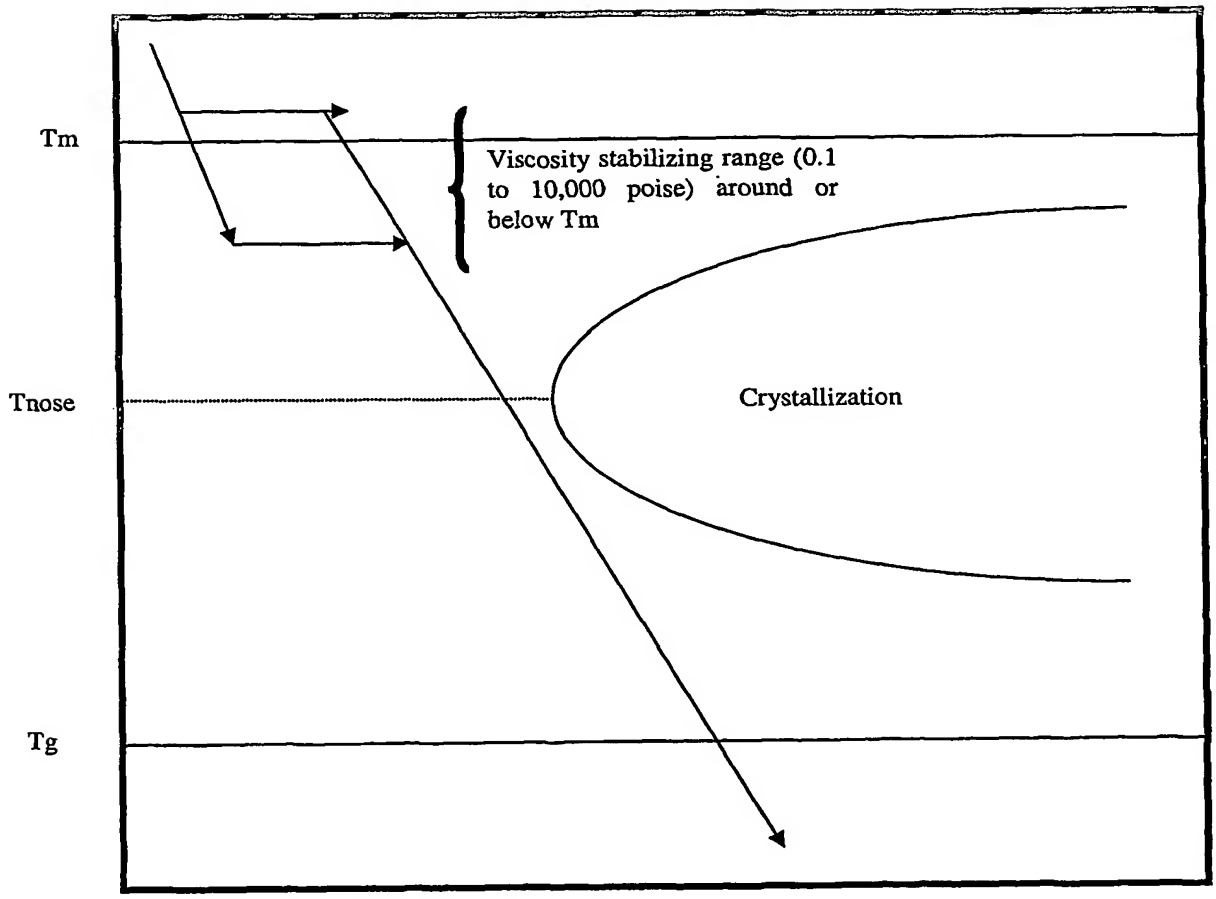

4000
2000
1000
600
viscosity (Pa s)
10^{16}
10^{14}
10^{12}
10^{10}
10^{8}
10^{6}
10^{4}
10^{2}
10^{0}
10^{-2}
10^{-4}
T_m
T_g
Zr
Ti
Ni
Be
Cu
Pure Metals
0.5
1.0
1.5
1000 / T (1 / K)

FIGURE 5


Tm
Tnose
Tg
Viscosity stabilizing range (0.1 to 10,000 poise) around or below Tm
Crystallization